



Strategic Work Plan

The Roanoke-Blacksburg Innovation Network is dedicated to accomplishing the recommendations of the *Innovation Blueprint*, a roadmap to build the innovation economy within the Roanoke and New River Valleys. The region shares an array of innovation assets and resources, yet is often marketed and managed as two separate valleys. The work of the Innovation Network is meant to capture the combined opportunities, connect the partners, and accelerate the economic potential to create high impact jobs and businesses in the region. We believe this region to be a place where:

- Local residents can effectively start and grow technology ventures
- Leading educational institutions and key businesses are close partners in commercializing technologies and fostering a strong workforce
- Talented people from around the world want to live, work, and play
- Community leaders understand that our future prosperity depends on fostering a culture of innovation in all parts of the region

Since the release of the *Innovation Blueprint*, business, civic, and education leaders continue to move forward with high-priority strategies. Professionals have volunteered thousands of hours in the region. As a result, the following milestones have already been met:

- Valley Ventures, a \$15 million early stage venture fund was established to help startups in technology and life sciences secure strategic funding for growth and market development
- A \$2 million seed fund is being established in cooperation with Virginia's CIT to bring in critical first money to businesses pursuing early equity funding
- Research has been completed on the region's innovation assets along with success stories to be used as the foundation for a marketing and awareness campaign
- New spaces where entrepreneurs vet business ideas and gain access to valuable services have been established in both Roanoke and Blacksburg

Using an ecosystem approach, the *Innovation Blueprint* outlines both tactical actions (what pieces of the innovation ecosystem must be built or expanded) and network activities (how the pieces work together to create something greater than the sum of the parts). This approach creates a hub and node model where otherwise silo programs are connected and ensuring that a shared set of goals can be effectively pursued.

The work of the Innovation Network is about maximizing economic opportunity for our residents and companies by building an entrepreneurial and innovative culture for high impact industries in the Roanoke and New River Valleys. This work plan targets areas that have been shown to create the greatest number of jobs and economic opportunities with the least amount of resources: innovation-based sectors, startups within those sectors, talent development and recruitment, and companies pursuing equity capital. Specific goals and tactics for FY2014-2015 implementation are duly noted.



VISION

To be nationally recognized as a place where innovation and entrepreneurship thrive, high-impact companies grow, and quality of talent is second to none.

MISSION

To develop an innovation ecosystem in the Roanoke and New River Valleys.

STRATEGIC INITIATIVES

The *Innovation Blueprint* documents the region's assets and recommends a systematic way to enhance the innovation ecosystem that fills gaps and maximizes opportunities for existing resources. These recommendations fall into four key strategies that we call the "Core Four."

1. Entrepreneurial Development

Goal: Increase the number and success of high-impact startups and innovation companies in the region through educational, advisory and mentoring services, enhanced access to capital, and new environments for entrepreneurial activity. High-impact companies represent the less than 5% of companies that create the majority of all jobs.

- Enhance and promote access to capital for start-up and high-impact companies through collaborative relationships with accredited individual investors, lenders, and institutional investors. Develop resident seed and early stage venture funds.
- Cultivate and support incubation and accelerator programs in both Roanoke and Blacksburg that are aimed at developing technology and innovation-focused companies.
- Establish a regional education and mentoring program that teams experienced executives and professionals with startup companies, helping them develop business strategies, and offering guidance through growth cycles.
- Develop a culture among the region's providers of entrepreneurial consulting and education services that supports a region-wide startup community that is positioned for growth and recognition beyond the region.

2. Talent Development & Recruitment

Goal: Provide a coordinated approach to talent recruitment and enhance connections between industry and education with a focus on developing a future innovation and entrepreneurial workforce with STEM-H (Science, Technology, Engineering, Math, and Healthcare) skillsets. Develop a pool of ambassadors who connect talent prospects to the interests and assets of the region.

- Establish a mentoring program that connects business and technical professionals directly to K-12 students through entrepreneurship and STEM-H programs.
- Increase the number of extracurricular STEM-H and entrepreneurial programs offered across the region by a variety of schools, colleges, universities, and non-profit organizations.

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- Produce shared messaging and promotional materials for use by local employers in the attraction of technical and upper-level management talent to the region.
 - Foster a regional workforce strategy to enhance the supply of STEM-H focused middle-skill jobs for the region’s growth sectors.

3. Industry-Education Partnerships

Goal: Enhance opportunities by connecting industry and institutions of higher education through a coordinated approach, making it easier for entrepreneurs to utilize the higher education assets available in the region and to commercialize new ideas. Create opportunities for students to engage in real-world entrepreneurial experiences.

- Enhance entrepreneurial and educational opportunities by connecting industry and institutions of higher education through a coordinated and targeted approach seeking to engage researchers, students, and businesses.
- Identify and capitalize on commercial opportunities between the region’s technology and innovation companies and its research institutions.
- Further relationships between the institutions of higher education as they develop their own internal systems of innovation within their respective organizations.

4. Marketing and Awareness

Goal: Market the region’s innovation and entrepreneurial assets and opportunities in order to create awareness of the region as a place where innovation-focused enterprises can succeed and thrive. Develop high-profile content that supports the region’s various marketing efforts.

- Conduct outreach and awareness within the region that helps entrepreneurs and businesses access the region’s array of research, entrepreneurship, and innovation expertise available from area colleges, universities, and service providers.
- Develop an innovation portal with shared success stories, presentation materials, and information that connects and highlights the region’s innovation ecosystem.

SPECIFIC TACTICS

Entrepreneurial Development

- Develop the Roanoke-Blacksburg startup “manifesto” that identifies and clarifies the key ingredients needed for the region’s startup community to flourish over the next decade and beyond. This roadmap will include key items that offer everyone interested in participation a clear “on-ramp”. *
- Develop the “startup community”, a joint-effort among the region’s providers of entrepreneur education and services. The startup community will share resources and best practices, identify opportunities, hold joint events, and work to brand the community. *

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- Support the development of new incubation spaces in the Roanoke and New River Valleys. *
 - Recruit mentors and launch a regional mentoring program that connects experienced professionals with startup companies that have been vetted as ready for acceleration. Develop a directory of advisor presenters, those willing to speak to groups on specific topics of interest. *
 - Develop a pipeline that showcases investor-ready companies to local angels and other sources of capital. *
 - Develop the region's equity capital assets through relationships with local and national investors. Seek to improve amount and sources of risk capital available to startups and high-impact companies.
 - Develop a series of commercialization roadmaps that identify industry-based research with commercialization potential, connecting the region's industry clusters with higher-education research and development assets.
 - Establish a Proof of Concept Center and de-risking fund to pursue commercialization opportunities.
 - Establish a regional crowdfunding program that allows for pre-angel investments in local startup companies.
 - Develop a community chest that supports future growth of the Innovation Network and support for the startup community and youth entrepreneur education programs.

Talent Development & Recruitment

- Catalog and map all K-12 extracurricular STEM-H programs in the region, providing streamlined contact information for individuals and businesses that wish to support programs in their area of interest. *
- Support and launch a regional FIRST LEGO League tournament and other regional STEM-H related events that should be taking place within the region for a community of our size. *
- Develop an ambassador program of stakeholders who are second points of contact for individuals looking to relocate to the region. *
- Identify the region specific STEM-H and middle skills occupational needs from employers and develop a program in conjunction with stakeholders to correct deficiencies accordingly.
- Coordinate industry engagement for K-12 extracurricular STEM-H programs and facilitate collaboration around career exploration efforts, targeting the engagement of smaller firms.
- Explore the opportunity to launch a regional young entrepreneurs program with assistance from stakeholders and area businesses.
- Produce shared messaging and promotional materials for use by local employers in the attraction of technical and upper-level management talent to the region. Explore the creation of a shared database with employers of individuals who are interested in relocation to the region.



Industry-Education Partnerships

- Establish a higher education consortium that focuses on student entrepreneurial activities and programs, and encourages participation in extracurricular entrepreneurial events. *
- Work closely with the institutions of higher education as they work to develop internal policies and programs that foster innovation. *
- Explore and capitalize on grant opportunities that seek to further the region's innovation ecosystem, startup community, and talent development efforts. *
- Connect industry and education stakeholders with STEM-H and middle skill talent development efforts and opportunities. *
- Catalog industry-related programs and initiatives among the area's higher education institutions and identify shared capacity and capabilities.
- Develop opportunities for collaboration from industry leaders and higher education stakeholders in areas of commercialization, general business development, and student engagement.
- Develop a technology transfer mentoring group to proactively seek research that has commercial potential and to mentor researchers through the process.

Marketing and Awareness

- Develop a regional innovation ecosystem portal: a website that showcases the region's innovation assets and opportunities, is home to the startup community, provides clear linkage to area resources offered by stakeholders, and shares regional success stories. *
- Develop and implement traditional and new media PR strategies that communicate the region's innovation message and metrics. *
- Launch social media channels that connect the stakeholder community, share the innovation message, and broaden awareness of the network. *
- Make presentations throughout the region and beyond that promote the importance of building the region's innovation ecosystem, strategic goals, and its impact on the region's growth opportunities. *
- Continue the collection of success stories and inventory of the region's innovation assets and economic impact, synthesizing the data for comparison to like-sized regions.
- Create shared messaging and presentation materials about the region's innovation ecosystem and develop a formal ambassador program.

* Denotes FY2014-2015 Priorities

PROGRAM MANAGEMENT

The majority of programs will be implemented through stakeholders and partners, capitalizing on the wealth of expertise and assets in the region. The *Innovation Blueprint* identified the lack of coordination and shared messaging as a key gap in the region, thus the creation of the Innovation Network. The Innovation Network is a non-profit organization that represents an alliance of businesses, engaged citizens, economic development organizations, and institutions of higher education. The primary responsibilities of the alliance include the following:

- To connect and more effectively leverage program resources and expertise related to building the region's innovation ecosystem
- To raise shared funds for programs and activities that support the goals of the *Innovation Blueprint*
- To oversee and participate in joint marketing and awareness of the region's innovation ecosystem

The Innovation Network complements the existing recruitment and expansion efforts of economic development and other non-profit organizations by focusing on the gaps in entrepreneurial development and innovation. The intention is to raise awareness about additional economic opportunities that will increase the size of the economic pie, not take away an existing slice.

While volunteers have and will continue to play a significant role, programs of the Innovation Network also require cash for the items that cannot be completed with in-kind contributions. With the Innovation Network acting as a portal for activities, funding supports both individual efforts and the operations of the Innovation Network hub itself. Funding for the Innovation Network comes from a variety of sources including grants, charitable contributions, community campaigns, partner contributions, and other means that will have minimal impact on the funding strategies of existing partner organizations. The Board of Directors of the Innovation Network (which represents a cross-section of the region's leading organizations) prioritizes activities and allocates funding.

The Innovation Network is managed by the Executive Director, who is the visible face of the organization and in the community for carrying out the work of building the region's innovation ecosystem. The Executive Director:

- Works closely with the Board of Directors to raise the funds necessary for successful operations
- Coordinates the implementation of the *Innovation Blueprint* strategies, including developing annual work plans, facilitating stakeholder meetings, and managing daily operations
- Oversees programmatic responsibilities such as the marketing and awareness strategy, connecting seed and early stage investments, developing mentors and advisory services
- Tracks the progress and impact of activities and communicates results to stakeholders
- Is active and visible in the region's science, technology, and innovation communities
- Is always seeking to advance the work of the Innovation Network through the development of win-win relationships with new stakeholders who value our efforts





PROJECTED IMPACT

In June 2012, there were approximately 172,000 private sector jobs in the Roanoke-Blacksburg area (source: BLS). Using state and national high tech employment rates, approximately 5.5% or 8,600 jobs can be directly attributed to the science and technology based jobs targeted in the *Innovation Blueprint*. For every 100 jobs added, the region increases its high tech employment base by ~1.2%. In comparison, the region lost 6.9% of its job base between 2008-2011 (-2.25% per year). The projected economic impact of the work of the Innovation Network comes from evaluating the results of other regions that have implemented similar efforts over the years. Using data from these best practices, we can estimate that our results would likely be as follows.

Jobs created.....	3-5 jobs per year, per company assisted
Average wage of new jobs/payroll.....	150-175% of regional average
Revenues from out of region.....	Average of 60-75% of all sales
Investment leverage.....	\$10-\$12 for every \$1 of resident capital
New products brought to market.....	.3-.5 per company, per year

Using these metrics and a conservative implementation plan, the potential annual impact to the Roanoke-Blacksburg region might look like something like the following.

Direct Regional Economic Impact

Net New Jobs.....	100
New Payroll.....	\$6,460,000
New to Market Revenues.....	\$15,750,000
New Products/Services to Market.....	12

Investment leverage

Leverage of \$4 million in seed funds over three to five years.....	\$40 million
Leverage of \$15 million in early stage over three to five years.....	\$150-180 million

How Do We Know We Are Making Progress?

Enhancements we are hoping for over the first three years:

- Our economic development stakeholders across the Roanoke and the New River Valleys report an increase in inquiries, recruitment leads, and expansion projects within high impact sectors
- The local press runs more stories about the region's innovation assets and successful start-up companies
- Stories about the region's innovation activities are featured in state and national press
- An increase in companies launching operations and receiving start-up capital
- Companies receiving capital and mentoring through the Innovation Network have a noticeable job and revenue growth advantage over their counterparts in the same industry

Longer-term indicators we are hoping to realize include:

- Industry sponsored research at universities and research centers have increased, with more commercialization projects sponsored by companies located within or near the region
- Growth in patents applied by and issued to companies in the region
- More students pursuing science, technology, engineering, math and healthcare related degrees and industry certifications
- Average wage of private sector jobs increasing faster than the state wage, closing the gap
- The job growth and business formation rates of science and technology sectors performing better than national and state averages